

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Robert C. Kowert (Reg. No39,255), the attorney in record, gave authorization for this Examiner's Amendment over the telephone during an interview. The claims amendments are as follow:

PLEASE AMEND THE CLAIMS AS FOLLOWS:

Please amend claims 1, 5, 13, 16, 19, 23, 25, 29, 37, 41 and 46, and please cancel claims 6, 7, 17, 20, 21, 30, 31, 42, 43 and 47-49, as indicated below.

1. (Currently amended) A system, comprising:

a server configured to host an application accessible by one or more clients via a network; and

a client device comprising a thin client configured to interact with the application via the network to remotely perform one or more functions of the application while a connection exists between the thin client and the application on the server;

wherein the system is configured to download a version of the application to the client device via the network, wherein the downloaded version of the application is configured to provide at least a portion of application logic of the application to the thin client; and

wherein the thin client is further configured to:

disconnect from the application on the server; and
access the downloaded version of the application on the client device to perform one or more functions of the application provided by the at least a portion of the application logic while the thin client is disconnected from the application;

wherein the application is configured to save a state of the thin client with the application before said disconnection;

wherein the downloaded version of the application is configured to maintain state information for said access of the downloaded version of the application on the client device;

wherein the thin client is further configured to reconnect to the application on the server via the network; and

wherein the application is further configured to update the saved state of

the thin client on the server according to the state information for
said access of the downloaded version of the application on the
client device.

2. (Original) The system as recited in claim 1, wherein the client device is further configured to store one or more changes made to application data during said access of the downloaded version of the application.

3. (Original) The system as recited in claim 2,
wherein the thin client is further configured to reconnect to the application on the server via the network; and
wherein the application on the server is further configured to integrate the one or more changes made to the application data on the client device into application data on the server after said reconnection.

4. (Original) The system as recited in claim 2,
wherein the thin client is further configured to reconnect to the application on the server via the network; and

wherein the system further comprises a synchronization service configured to integrate the one or more changes made to the application data on the client device into application data on the server.

5. (Currently amended) The system as recited in claim 1,

wherein the thin client is further configured to reconnect to the application on the server via the network; and

wherein the client device is further configured to delete the downloaded version of the application after said reconnection.

6. (Canceled)

7. (Canceled)

8. (Original) The system as recited in claim 1, wherein said download of the version of the application via the network is initiated by the application.

9. (Original) The system as recited in claim 1, wherein said download of the version of the application via the network is initiated by the thin client.

10. (Original) The system as recited in claim 1, wherein said download of the version of the application via the network is initiated in response to an indication that a network connection between the thin client and the application is to go down.

11. (Original) The system as recited in claim 1, wherein the server is in one tier of a tiered network environment, and wherein the client device is in another tier of the tiered network environment.

12. (Original) The system as recited in claim 1, wherein the application is implemented according to Java™ 2 Platform, Enterprise Edition (J2EE™), and wherein the application logic is implemented as Enterprise JavaBeans (EJBs).

13. (Currently amended) A system, comprising:
a processor; and
a memory storing program instructions executable by the processor to:
implement a thin client configured to interact with an application on
another system via a network to remotely perform one or more
functions of the application while a connection exists between the
thin client and the application on the other system;
download a version of the application via the network to the system,
wherein the downloaded version of the application is configured to

provide at least a portion of application logic of the application to the thin client;

wherein the thin client is further configured to:

disconnect from the application; and

access the downloaded version of the application on the client device to perform one or more functions of the application provided by the at least a portion of the application logic while the thin client is disconnected from the application;

wherein the application is configured to save a state of the thin client with the application before said disconnection;

wherein the program instructions are further executable by the processor to maintain state information for said access of the downloaded version of the application on the system;

wherein the thin client is further configured to reconnect to the application on the other system via the network; and

wherein the program instructions are further executable by the processor to provide the state information to the application to update the saved state of the thin client on the other system according to the provided state information.

14. (Original) The system as recited in claim 13, wherein the program instructions are further executable by the processor to store one or more changes made to application data during said access of the downloaded version of the application.

15. (Original) The system as recited in claim 14,
wherein the thin client is further configured to reconnect to the application on other system via the network; and
wherein the program instructions are further executable by the processor to provide the one or more changes made to the application data to the application for integration into application data on the other system after said reconnection.

16. (Currently amended) The system as recited in claim 13,
~~wherein the thin client is further configured to reconnect to the application on the other system via the network; and~~
wherein the program instructions are further executable by the processor to delete the downloaded version of the application from the system after said reconnection.

17. (Canceled)

18. (Original) The system as recited in claim 13, wherein the application is implemented according to Java™ 2 Platform, Enterprise Edition (J2EE™), and wherein the application logic is implemented as Enterprise JavaBeans (EJBs).

19. (Currently amended) A system, comprising:

a processor; and

a memory storing program instructions executable by the processor to:

implement an application configured for access by thin clients via a network for the thin clients to interact with the application to remotely perform one or more functions of the application while a respective connection exists between each thin client and the application;

download a version of the application via the network to a client system comprising a thin client, wherein the downloaded version of the application is configured to provide at least a portion of application logic of the application to the thin client during disconnected operation of the client system;

disconnect from the thin client and save a state of the thin client with the application before said disconnection;

reconnect to the thin client;

wherein state information is maintained on the client system for thin client access of the downloaded version of the application on the client system while disconnected from the application;
update the saved state of the thin client on the system after said reconnection according to the state information provided from the client system for the thin client access of the downloaded version of the application on the client system while disconnected from the application; and

integrate one or more changes made to application data on the client device while disconnected from the application into application data on the system after said reconnection.

20. (Canceled)

21. (Canceled)

22. (Original) The system as recited in claim 19, wherein the application is implemented according to JavaTM 2 Platform, Enterprise Edition (J2EETM), and wherein the application logic is implemented as Enterprise JavaBeans (EJBs).

23. (Currently amended) A system, comprising:

means for interacting with an application on a server to remotely perform one or more functions of the application on the server while a connection exists between a thin client and the application on the server;

means for downloading a version of the application on the server to a device comprising [[a]] the thin client, wherein the downloaded version of the application is configured to provide at least a portion of application logic of the application to the thin client;

means for accessing the downloaded version of the application on the client device via the thin client to perform one or more functions of the application provided by the at least a portion of the application logic while the thin client is disconnected from the application;

wherein a state of the thin client with the application is saved at the server before said disconnection;

means for maintaining state information for said accessing of the downloaded version of the application on the client device;

means for reconnecting to the application on the server via the network; and

means for updating the saved state of the thin client on the server according to the state information for said accessing of the downloaded version of the application on the client device.

24. (Original) The system as recited in claim 23, further comprising means for integrating one or more changes made to application data on the device into application data on the server after the thin client reconnects to the application.

25. (Currently amended) A method, comprising:

a thin client on a client device interacting with an application on a server via a network to remotely perform one or more functions of the application while a connection exists between the thin client and the application on the server;

downloading a version of the application to the client device via the network, wherein the downloaded version of the application is configured to provide at least a portion of application logic of the application to the thin client;

the thin client disconnecting from the application on the server and saving a state of the thin client with the application on the server before said disconnection; and

the thin client accessing the downloaded version of the application on the client device to perform one or more functions of the application provided by the at least a portion of the application logic while the thin client is disconnected from the application; and

maintaining state information for said accessing of the downloaded version of the application on the client device;

the thin client reconnecting to the application on the server via the network; and
updating the saved state of the thin client with the application on the server
according to the state information for said accessing of the downloaded
version of the application on the client device.

26. (Original) The method as recited in claim 25, further comprising storing one or more changes made to application data during said accessing the downloaded version of the application.

27. (Original) The method as recited in claim 26, further comprising:
the thin client reconnecting to the application on the server via the network; and
integrating the one or more changes made to the application data on the client device into application data on the server after said reconnection.

28. (Original) The method as recited in claim 26, further comprising:
the thin client reconnecting to the application on the server via the network; and
a synchronization service integrating the one or more changes made to the application data on the client device into application data on the server.

29. (Currently amended) The method as recited in claim 25, further comprising:

~~the thin client reconnecting to the application on the server via the network; and~~
~~deleting the downloaded version of the application after said reconnection.~~

30. (Canceled)

31. (Canceled)

32. (Original) The method as recited in claim 25, wherein the server is in one tier of a tiered network environment, and wherein the client device is in another tier of the tiered network environment.

33. (Original) The method as recited in claim 25, wherein said downloading of the version of the application via the network is initiated by the application.

34. (Original) The method as recited in claim 25, wherein said downloading of the version of the application via the network is initiated by the thin client.

35. (Original) The method as recited in claim 25, further comprising initiating said downloading of the version of the application via the network in response to an

indication that a network connection between the thin client and the application is to go down.

36. (Original) The method as recited in claim 25, wherein the application is implemented according to Java™ 2 Platform, Enterprise Edition (J2EE™), and wherein the application logic is implemented as Enterprise JavaBeans (EJBs).

37. (Currently amended) A computer-accessible storage medium storing program instructions computer-executable to implement:

downloading a version of an application to a client device via a network, wherein the downloaded version of the application is configured to provide at least a portion of application logic of the application to a thin client of the application on the client device, wherein said downloading is performed subsequent to the thin client interacting with the application on a server via the network to remotely perform one or more functions of the application
while a connection exists between the thin client and the application on the server;

the thin client disconnecting from the application on the server and saving a state of the thin client with the application on the server before said disconnection; and

the thin client accessing the downloaded version of the application on the client device to perform one or more functions of the application provided by the at least a portion of the application logic while the thin client is disconnected from the application; and

maintaining state information for said accessing of the downloaded version of the application on the client device;

the thin client reconnecting to the application on the server via the network; and

updating the saved state of the thin client with the application on the server according to the state information for said accessing of the downloaded version of the application on the client device.

38. (Original) The computer-accessible medium as recited in claim 37, wherein the program instructions are further configured to implement storing one or more changes made to application data during said accessing the downloaded version of the application.

39. (Original) The computer-accessible medium as recited in claim 38, wherein the program instructions are further configured to implement:

the thin client reconnecting to the application on the server via the network; and

integrating the one or more changes made to the application data on the client device into application data on the server after said reconnection.

40. (Original) The computer-accessible medium as recited in claim 38, wherein the program instructions are further configured to implement:

the thin client reconnecting to the application on the server via the network; and a synchronization service integrating the one or more changes made to the application data on the client device into application data on the server.

41. (Currently amended) The computer-accessible medium as recited in claim 37, wherein the program instructions are further configured to implement:

~~the thin client reconnecting to the application on the server via the network; and~~
deleting the downloaded version of the application after said reconnection.

42. (Canceled)

43. (Canceled)

44. (Original) The computer-accessible medium as recited in claim 37, wherein the program instructions are further configured to implement initiating said downloading of the version of the application via the network in response to an indication that a network connection between the thin client and the application is to go down.

45. (Original) The computer-accessible medium as recited in claim 37, wherein the application is implemented according to Java™ 2 Platform, Enterprise Edition (J2EE™), and wherein the application logic is implemented as Enterprise JavaBeans (EJBs).

46. (Currently amended) A system, comprising:

a server configured to host an application accessible by one or more clients via a network; and

a client device comprising a thin client configured to:

interact with the application via the network to remotely perform one or more functions of the application while a connection exists between the thin client and the application on the server; and

request a download of a version of the application to the client device via the network, wherein the version of the application is configured to provide at least a portion of application logic of the application to the thin client during disconnected operation of the client system;

wherein the server is further configured to:

determine if the thin client has access to the at least a portion of the application logic provided by the requested version of the application; and

if the thin client has access to the at least a portion of the application logic provided by the requested version of the application, download the version of the application to the client device via the network;

wherein the thin client is further configured to:

disconnect from the application on the server; and

if the thin client has access to the at least a portion of the application logic provided by the requested version of the application, access the downloaded version of the application on the client device to perform one or more functions of the application provided by the at least a portion of the application logic while the thin client is disconnected from the application;

wherein the client device is further configured to store one or more changes made to application data during said access of the downloaded version of the application;

reconnect to the application on the server via the network; and

wherein the application is further configured to integrate the one or more changes made to the application data on the client device into application data on the server after said reconnection

47. – 49. (Canceled)

Allowable Subject Matter

Claims 1-5, 8-16, 18-19, 22-29, 32-41 and 44-46 are allowed.

The following is an Examiner's statement of reasons for allowance:

The prior arts in record fail to teach "access the downloaded version of the application on the client device to perform one or more functions of the application provided by the at least a portion of the application logic while the thin client is disconnected from the application, wherein the application is configured to save a state of the thin client with the application before said disconnection, wherein the downloaded version of the application is configured to maintain state information for said access of the downloaded version of the application on the client device, wherein the thin client is further configured to reconnect to the application on the server via the network; and wherein the application is further configured to update the saved state of the thin client on the server according to the state information for said access of the downloaded version of the application on the client device," as recited in independent claim 1.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably

accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to El Hadji M Sall whose telephone number is 571-272-4010. The examiner can normally be reached on 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ario Etienne can be reached on 571-272-4001. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/El Hadji M Sall/

Examiner, Art Unit 2457

/Salad Abdullahi/

Primary Examiner, Art Unit 2457